

REMARKS

Claims 1-10 are now pending in the application. By this amendment, Claims 1-3 and 5-10 have been amended. The basis for these amendments can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendments and the following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance.

The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained therein.

I. Claim Rejections Under 35 U.S.C. § 112

Claims 1-10 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

Independent Claims 1 and 7 have been amended to recite “a first bath” and “a second bath.” In addition, Claim 7 has been amended to describe the pressure change within the second bath as “repeatedly changing a pressure in the second cleaning bath from an original state when the object to be cleaned is immersed in the second bath, to a different state and back to the original state.” Dependant Claims 2 and 3 have been amended to properly depend from an independent method claim while Claims 5 and 6 have been amended in accordance with the recommendations of the Examiner.

In light of the aforementioned amendments, Applicants respectfully submit that Claims 1 and 7, and the respective claims dependent therefrom, are in a condition for



allowance. In addition, Claims 9 and 10 have been re-written in independent form and are similarly in a condition for allowance. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

II. Claim Rejections Under 35 U.S.C. § 102

Claims 7-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nalewajek et al. (U.S. Patent No. 6,355,113).

Claims 7-8 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Johnson (U.S. Patent No. 3,714,075) or Scherliker et al. (3,085,918).

These rejections are respectfully traversed.

Claim 7 recites "repeatedly changing a pressure in the second cleaning bath from an original state when the object to be cleaned is immersed in the second bath, to a different state and back to the original state." See Specification at pg. 24, Ins. 7-13. That is, when the liquid crystal panels 1 are immersed in the "second bath," or immersion cleaning chamber 610, the pressure within the chamber 610 is repeatedly toggled between an atmospheric state and an evacuated or reduced pressure state. In this manner, Nalewajek, Johnson, and Sherliker are distinguished from the present invention in that none of the references teaches a pressure change within a second bath of a cleaning operation.

As Nalewajek, Johnson, and Sherliker each fail to disclose repeatedly changing a pressure within a second bath during immersion of a liquid crystal panel, Applicants respectfully submit that Nalewajek, Johnson, and Sherliker fail to teach each and every

element of the claimed invention. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claim 8 recites that the step of changing the pressure recited in Claim 7 further comprises reducing the pressure to a reduced state and, thereafter, returning the pressure to the original state. Inasmuch as Nalewajek, Johnson, and Sherliker each fail to disclose repeatedly changing a pressure within a second bath, Nalewajek, Johnson, and Sherliker also fail to teach the subject matter of Claim 8. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

III. **Allowable Subject Matter**

The Examiner has indicated that Claims 1-6 contain allowable subject matter. In light of the amendments contained herein, Claims 1-6 should be in a condition for allowance. In addition, the Examiner has noted that Claims 9 and 10 contain allowable subject matter and would be allowable if rewritten in independent form. Applicants have amended both Claims 9 and 10 to include the limitations of base Claim 7 and intervening Claim 8. Accordingly, Applicants respectfully submit that independent Claims 9 and 10 are in condition for allowance.

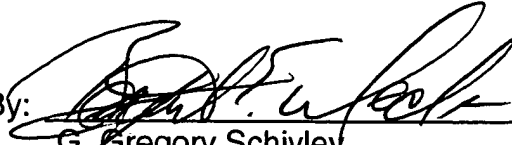
IV. **Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding office

action, and as such, the present application is in condition for allowance. If the Examiner believes that personal communication will expedite prosecution of this application, he/she is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

1. (Amended) A cleaning method comprising:

a pre-cleaning step of performing at least immersion cleaning for a work using a hydrocarbon-based cleaning liquid containing a surfactant in a first bath; and

a post-cleaning step of performing at least immersion cleaning for the work processed in the pre-cleaning step using a hydrocarbon-based [cleaning] liquid containing no surfactant in a second bath;

wherein, in the post-cleaning step, an operation of evacuating the inside of [a cleaning] the second bath and an operation of exposing [the inside] an interior of the second [cleaning] bath to air are repeated while the work is being immersed in the cleaning liquid of the second bath.

2. (Amended) The cleaning method according to Claim 1[, wherein the work is brought out from the cleaning liquid while being inclined] further including the step of inclining the work relative to a surface of the cleaning liquid in at least one of the pre-cleaning step and the post-cleaning step.

3. (Amended) The cleaning method according to Claim 1[, wherein the work is brought out from the cleaning liquid while] further including the step of [being moved up and down] moving the work up and down within the cleaning liquid during [in] at least one of the pre-cleaning step and the post-cleaning step.

5. (Amended) [A] The cleaning method according to Claim 1, wherein the work

comprises a [for manufacturing a liquid crystal device comprising a step of cleaning] liquid crystal panel[s enclosing liquid crystal therein as the works by a cleaning method according to Claim 1].

6. (Amended) The cleaning method [for manufacturing a liquid crystal device,] according to Claim 5, wherein the [pre-cleaning step and the post-cleaning step are performed for] liquid crystal panels are placed adjacent to each other in the first and second baths.

7. (Amended) A cleaning method comprising:

a pre-cleaning step including immersing an object to be cleaned in a first bath having a hydrocarbon based cleaning liquid containing a surfactant; and

a post-cleaning step including immersing the object to be cleaned from the pre-cleaning step in a second [cleaning] bath containing a hydrocarbon-based cleaning liquid containing no surfactant and while the object to be cleaned is immersed in the second bath, repeatedly changing a pressure in the second bath from an original state when the object to be cleaned is immersed in the second bath, to a different state and back to the original state [in the cleaning bath].

8. (Amended) The cleaning method of Claim 7, wherein said step of changing the pressure in the second [cleaning] bath further comprises reducing the pressure to a reduced state which is at a lower pressure than the original state and, thereafter, returning the pressure to [an] the original state.

9. (Amended) [The] A cleaning method [of Claim 8 wherein said] comprising:

a pre-cleaning step including immersing an object to be cleaned in a first bath having a hydrocarbon based cleaning liquid containing a surfactant; and
a post-cleaning step including immersing the object to be cleaned from the pre-cleaning step in a second bath containing a hydrocarbon-based cleaning liquid containing no surfactant while repeatedly changing a pressure from an original state to a reduced state of about 50 to 100 torr and back to the original state in the second bath [reduced state further comprises about 50 to 100 torr].

10. (Amended) [The] A cleaning method [of Claim 8 wherein] comprising:

a pre-cleaning step including immersing an object to be cleaned in a first bath having a hydrocarbon based cleaning liquid containing a surfactant; and
a post-cleaning step including immersing the object to be cleaned from the pre-cleaning step in a second bath containing a hydrocarbon-based cleaning liquid containing no surfactant while repeatedly changing a pressure from about atmospheric pressure to a reduced state and back to about atmospheric state in the second bath [said original state further comprises about atmospheric pressure].